

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333426-935

Luminaire Tested: **S125DIW-S850D1560U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333426-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S850D1560U935-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8197.9 lumens
Efficiency: N/A
Efficacy: 120.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

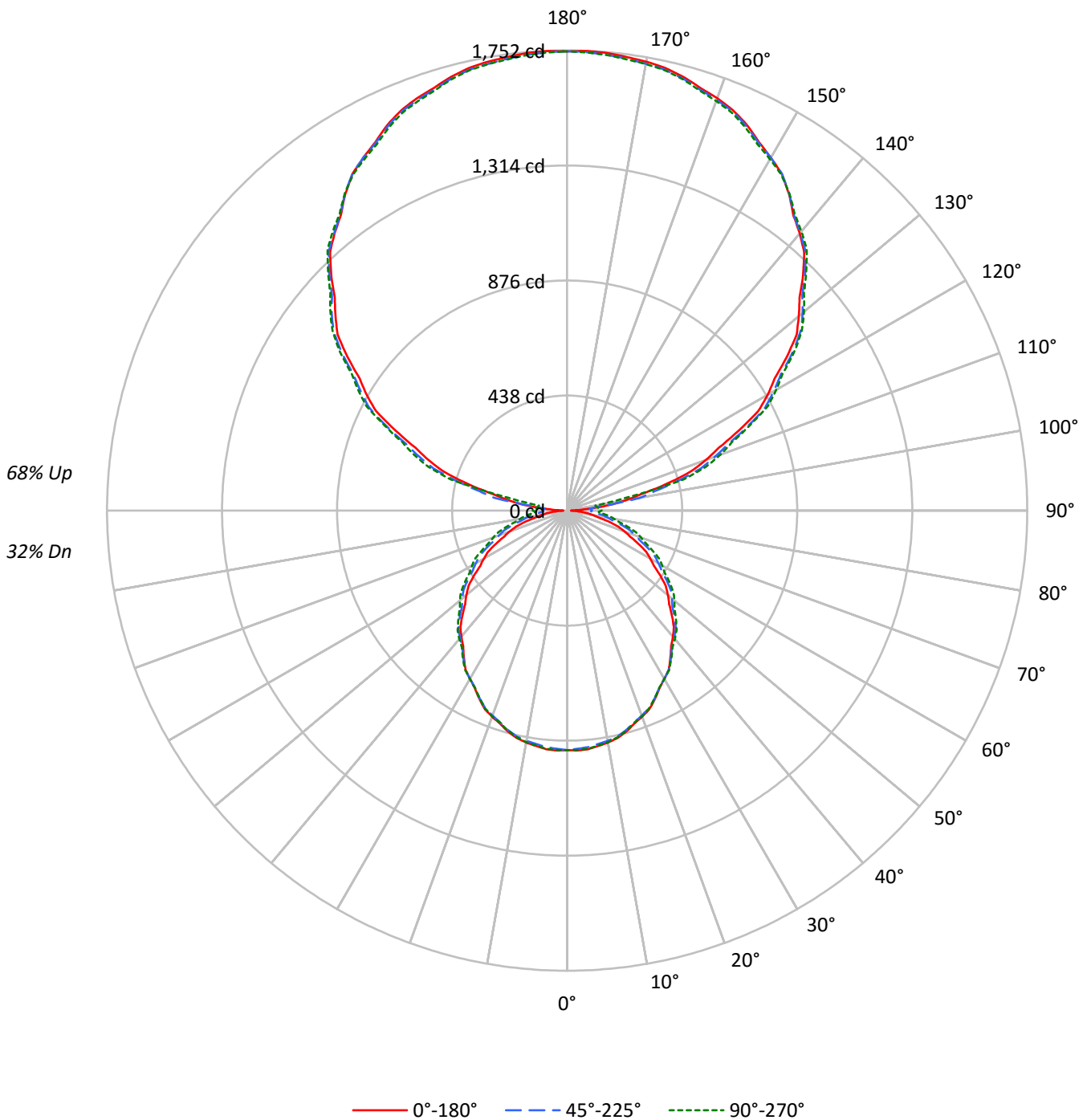
Input Watts (W): 68.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333426-935

CATALOG NUMBER: S125DIW-S850D1560U935-4F0-1E-UDD-D

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	32
1	93	89	85	81	84	80	77	74	64	61	59	48	47	46	35	34	33	26
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22
3	77	68	60	55	69	61	55	50	49	44	41	37	34	32	26	25	23	18
4	70	60	52	46	63	54	47	42	43	38	34	33	30	27	24	21	20	15
5	65	53	45	39	58	48	41	36	38	33	29	29	26	23	21	19	17	13
6	59	47	39	34	53	43	36	31	34	29	25	27	23	20	19	17	15	12
7	55	43	35	29	49	39	32	27	31	26	22	24	20	18	17	15	13	10
8	51	39	31	26	45	35	28	24	28	23	20	22	18	16	16	14	12	9
9	47	35	28	23	42	32	25	21	26	21	17	20	17	14	15	12	11	8
10	44	32	25	20	39	29	23	19	24	19	16	19	15	13	14	11	10	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5891	5891	5891
5°	5902	5782	5800
10°	5860	5679	5670
15°	5791	5555	5505
20°	5697	5402	5339
25°	5585	5239	5135
30°	5449	5059	4950
35°	5322	4893	4780
40°	5194	4719	4609
45°	5048	4570	4458
50°	4910	4408	4325
55°	4742	4256	4166
60°	4560	4082	4006
65°	4369	3900	3826
70°	4153	3651	3640
75°	3809	3412	3412
80°	3363	3122	3163
85°	2945	2924	3085



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.2	1.1
10°-20°	244.8	3.0
20°-30°	364.1	4.4
30°-40°	431.3	5.3
40°-50°	445.9	5.4
50°-60°	410.8	5.0
60°-70°	332.0	4.1
70°-80°	222.4	2.7
80°-90°	119.0	1.5
90°-100°	128.2	1.6
100°-110°	439.3	5.4
110°-120°	742.2	9.1
120°-130°	929.6	11.3
130°-140°	988.3	12.1
140°-150°	921.8	11.2
150°-160°	744.4	9.1
160°-170°	481.4	5.9
170°-180°	166.0	2.0
0°-30°	695.2	8.5
0°-40°	1126.5	13.7
0°-60°	1983.2	24.2
0°-90°	2656.5	32.4
90°-120°	1309.7	16.0
90°-150°	4149.5	50.6
90°-180°	5541.0	67.6
0°-180°	8197.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	912	912	912	912	912	
5°	912	910	904	911	910	86
15°	871	872	866	870	867	245
25°	791	794	789	792	788	364
35°	685	691	688	691	691	428
45°	564	574	578	584	586	435
55°	434	448	462	472	476	388
65°	299	319	341	354	358	296
75°	164	188	216	234	239	175
85°	49	79	110	129	137	52
90°	16	55	94	120	131	13
95°	86	103	86	111	118	103
105°	389	409	435	453	458	412
115°	721	734	758	768	767	714
125°	1021	1030	1047	1056	1057	911
135°	1271	1277	1281	1290	1287	979
145°	1472	1474	1474	1479	1475	920
155°	1620	1613	1615	1618	1608	746
165°	1710	1702	1703	1710	1700	483
175°	1748	1741	1742	1751	1741	166
180°	1748	1748	1748	1748	1748	



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CATALOG NUMBER: S125DIW-S850D1560U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	914.2	914.0	913.6	913.3	912.9	912.2	911.1	910.0	908.9	907.8	908.9
5°	912.1	911.7	911.3	910.9	910.5	909.6	908.2	906.8	905.4	904.0	905.6
7.5°	904.0	903.9	903.7	903.5	903.4	902.6	901.2	899.7	898.3	896.9	898.3
10°	896.9	896.9	896.9	896.9	896.9	896.1	894.5	892.9	891.3	889.8	891.1
12.5°	886.8	887.0	887.2	887.3	887.5	886.9	885.7	884.4	883.1	881.8	883.0
15°	871.0	871.2	871.3	871.5	871.8	871.2	869.8	868.4	866.9	865.6	866.8
17.5°	850.2	850.6	851.0	851.4	851.8	851.3	849.9	848.5	847.1	845.8	846.6
20°	835.2	835.6	835.9	836.4	836.8	836.3	834.9	833.5	832.1	830.7	831.3
22.5°	818.0	818.7	819.4	820.2	820.9	820.4	818.9	817.3	815.8	814.2	815.0
25°	791.3	791.9	792.6	793.2	793.8	793.4	792.3	791.1	789.9	788.7	789.5
27.5°	761.6	762.6	763.4	764.3	765.2	764.9	763.6	762.2	760.9	759.6	760.1
30°	739.5	740.7	741.9	743.0	744.2	744.2	743.0	741.9	740.7	739.5	739.9
32.5°	719.5	720.5	721.5	722.6	723.6	723.7	722.8	721.9	721.1	720.2	720.6
35°	684.9	686.4	687.8	689.1	690.5	691.0	690.3	689.7	689.1	688.5	689.1
37.5°	650.4	651.7	653.0	654.3	655.6	656.1	655.8	655.7	655.5	655.3	656.1
40°	626.8	628.4	630.0	631.6	633.2	633.9	633.7	633.5	633.3	633.1	633.9
42.5°	601.1	603.1	605.2	607.3	609.3	610.6	611.1	611.5	611.9	612.3	613.3
45°	564.2	566.5	568.6	570.8	573.0	574.5	575.6	576.5	577.6	578.5	580.0
47.5°	526.5	528.6	530.5	532.6	534.6	536.5	538.2	539.9	541.6	543.3	545.4
50°	500.8	502.9	505.1	507.3	509.5	511.7	513.8	516.1	518.2	520.4	522.6
52.5°	473.6	476.2	478.9	481.6	484.2	486.9	489.6	492.2	494.9	497.6	499.9
55°	433.7	436.9	440.1	443.2	446.4	449.6	452.8	456.0	459.1	462.3	464.5
57.5°	392.9	396.7	400.5	404.3	408.2	411.9	415.6	419.2	422.8	426.5	429.0
60°	365.8	369.7	373.7	377.6	381.6	385.6	389.6	393.6	397.5	401.5	404.5
62.5°	339.2	343.2	347.2	351.2	355.2	359.3	363.6	367.9	372.1	376.4	379.8
65°	298.7	303.2	307.8	312.4	316.9	321.6	326.4	331.1	336.0	340.7	343.7
67.5°	260.4	264.8	269.2	273.6	278.0	282.7	287.5	292.4	297.2	302.0	305.7
70°	232.5	237.0	241.6	246.2	250.8	255.6	260.8	266.0	271.1	276.3	280.1
72.5°	205.3	210.0	214.7	219.5	224.2	229.4	235.1	240.7	246.3	252.0	256.1
75°	164.5	169.7	174.9	180.0	185.2	191.0	197.3	203.7	210.0	216.4	220.3
77.5°	125.4	131.3	137.3	143.3	149.2	155.2	161.4	167.5	173.6	179.8	184.1
80°	101.1	107.0	113.0	118.9	124.9	131.2	138.0	144.7	151.5	158.3	162.6
82.5°	78.9	85.2	91.4	97.7	104.0	110.6	117.5	124.4	131.3	138.3	142.5
85°	49.2	55.7	62.3	68.9	75.4	82.1	89.1	96.1	103.1	109.9	114.3
87.5°	28.2	35.0	41.8	48.6	55.4	62.4	69.6	76.7	83.9	91.1	95.9
90°	15.6	24.3	32.9	41.6	50.3	59.0	67.8	76.5	85.3	94.0	100.0
92.5°	32.8	37.1	41.4	45.6	49.9	56.4	65.1	73.8	82.5	91.2	97.0
95°	85.5	89.8	94.1	98.4	102.7	102.8	98.6	94.4	90.2	86.0	91.9
97.5°	164.8	171.0	177.2	183.4	189.6	185.1	170.0	154.9	139.7	124.6	120.6
100°	226.3	231.4	236.3	241.4	246.4	252.7	260.2	267.8	275.3	282.8	244.0
102.5°	288.8	293.8	298.7	303.7	308.6	314.5	321.4	328.3	335.2	342.1	338.0
105°	389.1	393.5	397.8	402.1	406.4	411.6	417.5	423.5	429.5	435.4	439.4
107.5°	493.3	495.9	498.7	501.4	504.1	508.6	514.9	521.2	527.4	533.8	537.8
110°	561.0	563.4	565.8	568.2	570.5	574.8	580.9	587.1	593.2	599.3	602.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	625.3	627.8	630.5	633.1	635.7	639.8	645.6	651.3	657.1	662.9	665.4
115°	720.8	723.7	726.5	729.4	732.1	736.3	741.8	747.2	752.7	758.1	760.5
117.5°	819.8	820.6	821.4	822.3	823.1	826.6	832.6	838.5	844.6	850.5	852.4
120°	881.9	882.3	882.5	882.9	883.1	886.1	891.5	896.9	902.3	907.8	910.6
122.5°	936.2	937.5	938.9	940.3	941.7	944.8	949.6	954.4	959.2	964.1	966.6
125°	1021.1	1022.9	1024.7	1026.5	1028.3	1031.2	1035.2	1039.1	1043.1	1047.1	1049.1
127.5°	1101.3	1102.5	1103.7	1105.0	1106.2	1108.4	1111.5	1114.6	1117.7	1120.8	1123.1
130°	1151.1	1152.3	1153.5	1154.8	1156.0	1158.1	1161.2	1164.3	1167.3	1170.4	1172.3
132.5°	1200.1	1201.7	1203.3	1205.0	1206.6	1208.2	1209.7	1211.2	1212.7	1214.3	1216.9
135°	1270.7	1272.2	1273.8	1275.2	1276.8	1278.0	1278.8	1279.6	1280.4	1281.3	1283.2
137.5°	1335.6	1336.9	1338.3	1339.5	1340.9	1341.7	1341.8	1342.0	1342.1	1342.3	1344.8
140°	1377.3	1377.9	1378.5	1379.1	1379.7	1379.9	1379.8	1379.8	1379.7	1379.6	1382.3
142.5°	1415.7	1415.9	1416.1	1416.3	1416.4	1416.8	1417.2	1417.6	1418.2	1418.6	1420.6
145°	1472.0	1472.4	1472.7	1473.1	1473.5	1473.7	1473.7	1473.7	1473.7	1473.7	1475.0
147.5°	1520.4	1520.2	1520.1	1520.0	1519.8	1520.0	1520.4	1520.7	1521.0	1521.4	1522.1
150°	1551.4	1550.8	1550.3	1549.7	1549.1	1549.1	1549.7	1550.3	1550.8	1551.4	1552.0
152.5°	1581.5	1580.3	1579.0	1577.7	1576.4	1576.1	1576.7	1577.3	1577.9	1578.4	1579.0
155°	1620.1	1618.4	1616.7	1615.0	1613.3	1612.7	1613.3	1613.8	1614.4	1615.0	1615.8
157.5°	1649.9	1648.9	1647.9	1646.8	1645.8	1645.3	1645.4	1645.5	1645.5	1645.5	1646.5
160°	1670.7	1669.0	1667.2	1665.5	1663.8	1663.0	1663.4	1663.6	1663.9	1664.2	1665.3
162.5°	1687.3	1685.6	1683.9	1682.0	1680.3	1679.6	1679.9	1680.2	1680.5	1680.8	1682.4
165°	1709.6	1707.9	1706.1	1704.3	1702.6	1701.9	1702.2	1702.5	1702.8	1703.1	1704.8
167.5°	1726.1	1724.4	1722.6	1720.8	1719.0	1718.3	1718.6	1718.8	1719.2	1719.4	1721.5
170°	1735.5	1733.5	1731.5	1729.4	1727.4	1726.6	1726.8	1727.2	1727.4	1727.7	1730.0
172.5°	1741.7	1739.7	1737.7	1735.7	1733.6	1732.9	1733.5	1734.0	1734.5	1735.0	1737.1
175°	1748.4	1746.7	1745.0	1743.3	1741.5	1740.9	1741.1	1741.4	1741.7	1742.0	1744.3
177.5°	1751.5	1750.2	1748.8	1747.4	1746.0	1745.4	1745.7	1745.9	1746.1	1746.4	1748.0
180°	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	910.0	911.1	912.2	912.7	912.6	912.4	912.2	912.1
5°	907.2	908.8	910.4	911.1	910.9	910.7	910.5	910.3
7.5°	899.7	901.0	902.4	903.0	902.8	902.7	902.4	902.2
10°	892.5	893.9	895.3	895.9	895.7	895.5	895.3	895.1
12.5°	884.0	885.1	886.1	886.4	885.9	885.4	884.8	884.3
15°	868.0	869.2	870.4	870.6	869.8	868.9	868.1	867.4
17.5°	847.6	848.5	849.4	849.6	849.1	848.7	848.2	847.7
20°	831.9	832.5	833.1	833.4	833.4	833.4	833.4	833.4
22.5°	815.8	816.5	817.3	817.4	816.9	816.5	816.0	815.5
25°	790.3	791.1	791.9	791.8	790.7	789.8	788.8	787.8
27.5°	760.6	761.2	761.7	761.9	761.5	761.1	760.8	760.4
30°	740.3	740.7	741.1	741.2	741.0	740.8	740.6	740.4
32.5°	721.0	721.3	721.8	721.9	721.7	721.5	721.3	721.1
35°	689.7	690.3	691.0	691.2	691.2	691.2	691.2	691.2
37.5°	656.9	657.6	658.4	658.8	658.8	658.7	658.6	658.5
40°	634.6	635.5	636.3	636.9	637.2	637.7	638.1	638.4
42.5°	614.2	615.2	616.1	616.6	616.7	616.8	616.9	617.0
45°	581.3	582.7	584.1	584.9	585.1	585.3	585.5	585.7
47.5°	547.3	549.4	551.4	552.7	553.1	553.5	554.0	554.4
50°	524.8	527.0	529.2	530.5	531.2	531.8	532.4	533.0
52.5°	502.2	504.5	506.9	508.3	508.8	509.2	509.6	510.1
55°	466.7	468.9	471.1	472.5	473.3	474.2	474.9	475.7
57.5°	431.5	434.0	436.5	438.1	438.7	439.3	439.9	440.5
60°	407.4	410.4	413.5	415.2	415.8	416.4	417.0	417.6
62.5°	383.1	386.3	389.7	391.7	392.4	393.2	393.9	394.7
65°	346.6	349.7	352.6	354.5	355.3	356.1	356.9	357.7
67.5°	309.3	312.9	316.5	318.8	319.9	320.9	321.9	323.0
70°	283.9	287.7	291.4	293.9	295.1	296.3	297.5	298.7
72.5°	260.2	264.2	268.4	270.9	271.7	272.6	273.5	274.3
75°	224.4	228.3	232.3	234.8	235.7	236.8	237.7	238.8
77.5°	188.5	192.9	197.3	199.8	200.6	201.4	202.2	203.0
80°	167.0	171.4	175.7	178.3	179.2	179.9	180.7	181.5
82.5°	146.6	150.8	155.1	157.9	159.4	160.7	162.2	163.7
85°	118.7	123.1	127.5	130.4	132.1	133.6	135.3	136.8
87.5°	100.8	105.6	110.5	113.7	115.3	116.8	118.4	119.9
90°	106.1	112.1	118.1	122.3	124.5	126.7	129.0	131.2
92.5°	102.9	108.7	114.6	118.4	120.2	122.0	123.8	125.6
95°	97.6	103.5	109.3	112.9	114.3	115.6	117.0	118.4
97.5°	116.7	112.7	108.7	107.5	108.8	110.2	111.5	112.9
100°	205.3	166.5	127.8	108.4	108.5	108.5	108.6	108.6
102.5°	333.9	329.8	325.6	314.4	296.0	277.7	259.2	240.8
105°	443.3	447.4	451.3	453.8	455.0	456.1	457.2	458.3
107.5°	541.7	545.8	549.7	551.9	552.3	552.7	553.0	553.4
110°	605.2	608.1	611.0	613.3	615.0	616.6	618.4	620.0



TEST NUMBER: P333426-935

CATALOG NUMBER: S125DIW-S850D1560U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	667.9	670.5	673.0	674.7	675.7	676.7	677.7	678.6
115°	762.9	765.3	767.8	768.8	768.2	767.7	767.2	766.6
117.5°	854.3	856.2	858.0	859.3	859.9	860.5	861.1	861.7
120°	913.3	916.2	918.9	920.2	920.0	919.8	919.5	919.3
122.5°	969.3	972.0	974.6	975.7	975.2	974.7	974.2	973.8
125°	1051.1	1053.2	1055.2	1056.3	1056.4	1056.5	1056.6	1056.8
127.5°	1125.3	1127.7	1130.0	1130.7	1129.6	1128.7	1127.7	1126.7
130°	1174.2	1176.2	1178.1	1178.9	1178.4	1177.9	1177.5	1177.1
132.5°	1219.4	1222.1	1224.7	1225.6	1225.0	1224.4	1223.8	1223.2
135°	1285.2	1287.3	1289.3	1289.9	1289.2	1288.4	1287.7	1286.9
137.5°	1347.2	1349.7	1352.1	1353.0	1352.3	1351.6	1350.9	1350.2
140°	1385.1	1387.8	1390.6	1391.5	1390.6	1389.7	1388.7	1387.8
142.5°	1422.5	1424.5	1426.5	1427.0	1426.1	1425.1	1424.2	1423.3
145°	1476.3	1477.6	1478.8	1478.9	1478.1	1477.1	1476.2	1475.2
147.5°	1522.7	1523.4	1524.1	1523.5	1521.8	1520.1	1518.4	1516.7
150°	1552.6	1553.2	1553.8	1553.0	1550.9	1548.8	1546.7	1544.5
152.5°	1579.6	1580.1	1580.7	1579.9	1578.0	1575.9	1573.9	1571.8
155°	1616.7	1617.6	1618.4	1617.6	1615.4	1613.1	1610.8	1608.4
157.5°	1647.4	1648.3	1649.2	1648.6	1646.2	1643.9	1641.6	1639.3
160°	1666.5	1667.7	1668.8	1668.3	1665.9	1663.6	1661.3	1659.1
162.5°	1684.0	1685.7	1687.2	1686.8	1684.3	1681.7	1679.2	1676.6
165°	1706.5	1708.3	1710.0	1709.7	1707.4	1705.1	1702.8	1700.5
167.5°	1723.5	1725.6	1727.7	1727.4	1724.8	1722.3	1719.7	1717.1
170°	1732.3	1734.7	1736.9	1736.8	1734.2	1731.6	1729.0	1726.4
172.5°	1739.1	1741.2	1743.3	1743.0	1740.4	1737.8	1735.3	1732.7
175°	1746.5	1748.9	1751.2	1751.0	1748.4	1745.8	1743.3	1740.7
177.5°	1749.6	1751.2	1752.8	1752.7	1750.8	1749.0	1747.1	1745.3
180°	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4

(END OF REPORT)